

## Summary of the ARRT's Clinical Experience Requirements for CT Effective for Examinations Beginning January 2003

The ARRT has adopted a set of Clinical Experience Requirements which must be met before a technologist is eligible to sit for the ARRT Computed Tomography Exam.

To obtain a complete set of Computed Tomography Clinical Experience Requirements including all necessary forms and revisions or if you have any questions, contact the ARRT at 651-687-0048.

### Overview

In order to satisfy the clinical experience requirements, there are five steps which must be followed:

1. Performance—During the 24 months preceding your application for examination, perform the required number of repetitions for each procedure as listed in the charts that follow. An examination on one patient may be used to address several procedures.
2. Documentation—Document the performance of each repetition using the Computed Tomography Imaging Clinical Experience Documentation Form available from the ARRT. Each repetition must be initialed by a Registered Technologist or a licensed physician.
3. Exam Application—Complete the Application Verification Section on the examination application to indicate that you have completed the requirements.
4. Record Maintenance—Maintain records of performance of the procedures for at least 24 months following submission of the application for examination.
5. Audits—Random audits will be conducted. If you are audited, you must send a copy of the documentation detailed above to the ARRT. If the ARRT determines that this documentation is false, they may revoke all current registrations and make you ineligible for any future registrations.

### Specific Procedural Requirements

- The Clinical Experience Requirements for Computed Tomography consist of the 54 procedures in the 9 different categories as shown on the back of this summary.
- Applicants must complete and document the performance of a subset of these 54 procedures according to the following 3 rules:
  1. Choose at least 25 different procedures out of the 54 procedures listed
  2. Complete at least 3 and not more than 5 repetitions of each of the chosen procedures
  3. Complete a total of at least 125 repetitions across all of the chosen procedures

### General Guidelines

- evaluation of requisition and/or medical record
- identification of patient and documentation of patient history including allergies
- patient assessment and education concerning the procedure
- preparation of examination room
- patient positioning
- selection of protocol and parameters
- display, filming and archiving of images
- documentation of procedure, treatment and patient data in appropriate records
- discharge of patient with post-procedure instructions
- universal precautions
- radiation protection
- preparation and/or administration of contrast media
- evaluation of resulting images for the following:
  - image quality (e.g. motion, artifacts, noise)
  - optimal demonstration of anatomic region (e.g. delayed imaging, reconstruction spacing, algorithm, slice thickness)
  - exam completeness

## Computed Tomography Clinical Experience Requirement Procedures

<b>Categories</b>	<b>Procedures</b>
<b>A. Head</b>	<ol style="list-style-type: none"> <li>1. routine head</li> <li>2. sinuses</li> <li>3. facial/orbit</li> <li>4. temporal bones</li> <li>5. trauma head</li> <li>6. vascular head (CTA)</li> </ol>
<b>B. Neck</b>	<ol style="list-style-type: none"> <li>1. soft tissue neck</li> <li>2. larynx and vocal cords</li> <li>3. vascular neck (CTA)</li> </ol>
<b>C. Spine &amp; Musculoskeletal</b>	<ol style="list-style-type: none"> <li>1. lumbar</li> <li>2. cervical</li> <li>3. thoracic</li> <li>4. spinal trauma</li> <li>5. upper extremity</li> <li>6. lower extremity</li> <li>7. pelvic girdle; hips</li> <li>8. musculoskeletal trauma</li> <li>9. CT arthrography</li> <li>10. vascular extremity (CTA)</li> </ol>
<b>D. Chest</b>	<ol style="list-style-type: none"> <li>1. routine chest</li> <li>2. HRCT</li> <li>3. vascular chest (i.e. PE)</li> <li>4. chest trauma</li> <li>5. airway (trachea, bronchus)</li> <li>6. heart (e.g. cardiac scoring, angiography)</li> </ol>
<b>E. Abdomen</b>	<ol style="list-style-type: none"> <li>1. routine abdomen</li> <li>2. liver (multi-phase)</li> <li>3. kidneys (with contrast)</li> <li>4. pancreas</li> <li>5. adrenals</li> <li>6. GI tract</li> <li>7. renal stone</li> <li>8. abdominal trauma</li> <li>9. vascular abdomen (CTA)</li> <li>10. CT intravenous urogram</li> </ol>
<b>F. Pelvis</b>	<ol style="list-style-type: none"> <li>1. routine pelvis</li> <li>2. bladder</li> <li>3. pelvic trauma</li> <li>4. vascular pelvis (CTA)</li> <li>5. colorectal studies</li> </ol>
<b>G. Special Procedures</b>	<ol style="list-style-type: none"> <li>1. biopsies</li> <li>2. drainage/aspirations</li> <li>3. radiation therapy planning</li> </ol>
<b>H. Image Display &amp; Postprocessing</b>	<ol style="list-style-type: none"> <li>1. geometric or distance measurements</li> <li>2. region of interest measurement (ROI)</li> <li>3. retrospective reconstruction</li> <li>4. multiplanar reconstruction (MPR)</li> <li>5. 3-D rendering (MIP, SSD, VR)</li> </ol>
<b>I. Quality Assurance</b>	<ol style="list-style-type: none"> <li>1. calibration checks</li> <li>2. CT number (e.g., water phantom)</li> <li>3. standard deviation (i.e., noise)</li> <li>4. linearity</li> <li>5. spatial resolution</li> <li>6. contrast resolution</li> </ol>